

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

OCD Hobbs

FORM APPROVED  
OMB NO 1004-0135  
Expires: July 31, 2010**SUNDRY NOTICES AND REPORTS ON WELLS**  
*Do not use this form for proposals to drill or to re-enter an abandoned well. Use form 3160-3 (APD) for such proposals.*

SEP 22 2011

**SUBMIT IN TRIPLICATE - Other instructions on reverse side.**

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other: INJECTION		5. Lease Serial No. NMLC056968
2. Name of Operator SANDRIDGE EXPL & PROD LLC		6. If Indian, Allottee or Tribe Name
Contact: TERRY B CALLAHAN E-Mail: tcallahan@lennenergy.com		7. If Unit or CA/Agreement, Name and/or No NMNM70974X
3a. Address 123 ROBERT S KERR AVENUE OKLAHOMA CITY, OK 73102	3b. Phone No (include area code) Ph: 281-840-4272	8. Well Name and No. LMQU 22
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 15 T25S R37E SESW 668FSL 1633FWL		9. API Well No. 30-025-23186-00-S1
		10. Field and Pool, or Exploratory LANGLIE
		11. County or Parish, and State LEA COUNTY, NM

## 12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input checked="" type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-Off
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Alter Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

NOTE: THIS IS AN AMENDED SUBSEQUENT FOR THE EARLIER ONE DATED 9/7/2011

Acidize &amp; Return to Production

7/21/11 - SITP 0 PSI; SICP 0 PSI ND well head. NU BOP & catch pan. Unset packer. POH w/ 2 3/8" cement line tubing & packer. RIH w/ 5 1/2" lok-set RBP & arrow set packer. Set RBP @ 3140'; set packer @ 3116'. SDFN.

7/22/11 - RU basic pump truck. Tested RBP 1000 PSI ok. Tested casing 625 PSI f/ 30 mins ok. Tested casing w/ chart 340 PSI loss 15 PSI in 30 min. RD pump truck. Unset packer RIH latch on RBP unset POH. RIH w/ 5 1/2" Arrow set packer 2 7/8" tubing packer swing @ 3148'.

7/25/11 - SITP 0 PSI; SICP 0 PSI. RU Petroplex acidizing. Acidize perf. 3244'-3491' w/ 1500 gals. 15% NEFE acid 700# rock salt as diversion. Spot acid 1 BBLS from packer set packer @ 3148'.

14. Thereby certify that the foregoing is true and correct.

Electronic Submission #117216 verified by the BLM Well Information System

For SANDRIDGE EXPL &amp; PROD LLC, sent to the Hobbs

Committed to AFMSS for processing by DEBORAH MCKINNEY on 09/13/2011 (11DLM0755SE)

Name (Printed/Typed) TERRY B CALLAHAN

Title REGULATORY SPECIALIST III

Signature (Electronic Submission)

Date 09/09/2011

## THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved By

ACCEPTED

DUNCAN WHITLOCK  
Title LEAD PET

Date 09/19/2011

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Hobbs

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\*

## Additional data for EC transaction #117216 that would not fit on the form

### 32. Additional remarks, continued

Press. Up 4000 PSI loss 1000 PSI in 6 MINS. Repress. 4 times broke back to 2200 PSI  
Stage # 1 pump 500 gals acid 3.4 BPM @ 847 PSI followed by 300# block saw 439 PSI increase w/ block on formation.  
Stage #2 pump 500 gals acid 2.2 BPM @ 1250 PSI followed by 400# block saw 3000 PSI increase w/block on formation.  
Stage #3 pump 500 gals acid 2.8 BPM @ 1280 PSI.  
Flush w/ 39 BBLS 2.8 BPM @ 1466 PSI  
ISIP 1329 PSI MAX pressure 4400 PSI AVG pressure 1500 PSI  
5 MINS 854 PSI MAX rate 3.2 BPM Avg. rate 2.4 BPM  
10 MINS 592 PSI  
15 MINS 324 Load 118 BBLS  
1 hr shut in 0 PSI; Unset packer POH lay down 2 7/8" tubing & packer.  
7/26/11 - SICP 0 psi. RIH w/ 2-3/8" cement line tbg. Unloaded 2-3/8" IPC tubing. RU Monk tbg testers. RIH w/ 5-1/2" AD-1 pkr & PU 2-3/8" IPC tbg testing pkr & tbg to 4000 psi. RD Monk. SDFN.  
7/27/11 - SITP 0 psi; SICP 0 psi; Set packer @ 3175. RU pump truck. Loaded casing w/ 25 BBLS water. BOP rams leaking check rams ok tested BOP rams leaking. RD pump truck. ND BOP NU new BOP. Set packer @ 3175.  
7/28/11 - SITP 0 psi, SICP 0 psi, RU pump truck, test csg 580 psi for 30 mins; loss 20 psi. Unset pkr ND BOP. NU WH w/ no slips. Circ 70 bbls pkr fluid. Set pkr w/ 21,000# tension @ 3175'. Tested csg 580 psi loss 20 psi in 30 mins. RD pump truck. SDFN.  
7/29/11 - RDPU. Clean location. WO orders. SDFWE.  
8/15/11 - MIRUPU. SITP 50 psi; SICP 0 psi. ND WH NU BOP & catch pan. Unset pkr; POH w/ 2-3/8" IPC tbg. SDFN.  
8/16/11 - SICP 0 psi. RU tbg testers, RIH w/ 5-1/2" Arrow set pkr T-2 on/off tool w/ 1.50 "F" profile 2-3/8" IPC tbg testing to 4000 psi. RD tubing testers. SDFN.  
8/17/11 - SITP 0 psi; SICP 0 psi. RU pump truck loaded csg w/ 23 bbls water tested csg to 520 psi f/ 30 mins, ok. Rls on/off tool ND catch pan & BOP NU WH without slips. Mix pkr fluid, circ 80 bbls pkr fluid. Latch on to pkr, NU WH w/ 13,000# tension on packer. Tested csg 560 psi f/ 30 mins, loss 20 psi, RD pump truck. RDPUMO.  
101 jts, 2-3/8" IPC tbg w/ T-2 on/off tool w/ 1.50 "F" profile 5-1/2 x 2-3/8" Arrow set packer.  
8/23/11 - Injection volumes reported to the State of New Mexico after passing MIT test witnessed by Mark Whitaker of the OCD.  
200 psi; 29 bwpd

## Conditions of Approval: Wells with Packers\*

Linn Operating, Inc.  
Langlie Mattix Queen Unit 022  
API 3002523186  
September 14, 2011

1. Conduct a Mechanical Integrity Test of the tubing/casing annulus after a tubing, packer or casing seal is established. Repair that seal any time more than five barrels of packer fluid is replaced within 30 days.
  - a. The minimum test pressure should be 500 psig for 30 minutes or 300 psig for 60 minutes, with 200 psig differentials between tubing and casing pressure (at test time) but no more than 70% of casing burst pressure as described by Onshore Order 2.III.B.1.h. (The tubing or reservoir pressure may need to be reduced). An alternate method for a BLM approved MIT is to have the fluid filled system open to atmospheric pressure and have a loss of less than five barrels in 30 days witnessed by a BLM authorized officer.
  - b. Document the pressure test on a calibrated recorder chart registering within 25 to 85 per cent of its full range. Greater than 10% pressure leakoff will be viewed as a failed MIT. Less than 10% pressure leakoff will be evaluated site specifically and may restrict injection approval.
  - c. Notify Paul R. Swartz at 575-234-5985 and/or 575-200-7902 at least 24 hours before the test. If there is no response, notify the BLM on call drilling phone, 575-361-2822. In Lea County call 575-393-3612.
  - d. Submit a subsequent Sundry Form 3160-5 relating the MIT activity. Include a copy of the recorded MIT pressure chart. List the name of the BLM witness, or the notified person and date of notification. NMOCD is to retain the original recorded MIT chart.
  - e. Use of tubing internal protection, on/off tubing equipment just above the packer, and a profile nipple installation is required. The setting depths and descriptions of each are to be included in the subsequent sundry. List (by date) descriptions of daily activity of any previously unreported wellbore work.
  - f. **Submit the original subsequent sundry with three copies to BLM Carlsbad.**
2. Compliance with a NMOCD Administrative Order is required, submit documentation of that authorization.
  - a. Approved injection pressure compliance is required.
  - b. If injection pressure exceeds the approved pressure you are required to reduce that pressure and notify the BLM within 24 hours.
  - c. When injection pressure is within 50 psig of the maximum pressure, install automation equipment that will prevent exceeding that maximum.
    - i. Submit a subsequent report (Sundry Form 3160-5) describing the installed automation equipment within 30 days.
  - e. Other unexplained significant variations of rate or pressure to be reported within 5 days of notice.

3. The casing/tubing annulus is required to be monitored for communication with injection fluid or loss of casing integrity.
- a. The annulus is to be maintained full of packer fluid at atmospheric pressure. Installation of equipment that will display on site, continuous open to the air fluid level is required. A BLM inspector may request verification of this fluid level at any time.
  - b. **Submit a subsequent report (Sundry Form 3160-5)** describing the installation of packer fluid level monitoring equipment within 30 days of this approval.
  - c. The operator shall keep monthly records documenting that the casing annulus is fluid filled. A suggested format for these records is available from the BLM Carlsbad Field Office. Copies of those records shall be furnished at the request of a BLM authorized officer.
  - d. Loss of packer fluid above five barrels per month requires notification of the BLM authorized officer within 5 days.
  - a. Gain of annular fluid requires notification within 24 hours. Cease injection and maintain a production casing pressure of Opsia. Notify the BLM's authorized officer (Paul R. Swartz at 575-200-7902). If there is no response, notify the BLM on call drilling phone, 575-361-2822. In Lea County call 575-393-3612.
  - e. Also submit to this office a (Sundry Form 3160-5) Notice of Intent (NOI) for approval by BLM and NMOCD with a detailed plan for correction and the anticipated date of correction. Verbal approval for the plan may be given by a BLM authorized officer, with the NOI filed within five business days.
  - f. After the repairs submit a (Sundry Form 3160-5) Subsequent report, describing the repair(s) and Mechanical Integrity Test as per item 1 above.

\*COA's prepared by Paul R. Swartz